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**NEWS
OF THE
HYDRAULICS
DIVISION
OF
ASCE**



**JOURNAL OF THE HYDRAULICS DIVISION
PROCEEDINGS OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS**

DIVISION ACTIVITIES

HYDRAULICS DIVISION

Proceedings of the American Society of Civil Engineers

NEWS

August, 1958

PURPOSE OF THE HYDRAULICS DIVISION

(Quoted from the Official Register)

The advancement and dissemination of knowledge relating to the occurrence of water in nature and its behavior in structures, water courses, underground.

In particular the field of the Hydraulics Division shall embrace meteorology and hydrology as they affect the engineer, fluid mechanics in engineering, and applied hydraulics as a branch of engineering science which furnishes the basis for hydraulic design and for the practical use of water in different specialized branches of hydraulic engineering."

TECHNICAL COMMITTEE NEWS

Flood Control Committee

The newly organized Task Force on Flood Plain Zoning (see April 1958 letter) has the following membership.

G. R. Shanklin, Chairman
Frank Kochis
J. E. Goddard
L. V. Sheridan
W. S. Wise

Hydraulic Structures Committee

The Committee on Hydraulic Structures met in Chicago February 28 and March 1, 1958, following the Chicago Convention. Program plans for 1958 and the work of the Committee's Task Forces were discussed.

J. H. Douma is Chairman of this Committee.

The Task Force on Energy Dissipators for Spillways and Outlet Works was instrumental in the publication of a series of six papers on stilling basins in

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the October 1957 Journal. The work of the task force will be extended with emphasis on bucket energy dissipators and on prototype performance. Mr. R. H. Berryhill is Chairman of this Task Force.

The Task Force on Friction Factors in Large Conduits, after reviewing available literature, concluded that there was a general lack of additional prototype information to add anything significant to USBR Engineering Monograph No. 7, "Friction Factors for Large Conduits Flowing Full." However, the hydraulic design of large conduits involves not only friction factors, but also losses caused by transitions, junctions, bends, etc. and problems concerning cavitation and air entrainment. It is planned to discontinue the Task Force on Friction Factors in Large Conduits and to establish a new Task Force on Flow in Large Conduits. The objectives are:

To assemble and evaluate information on hydraulic characteristics, air entrainment, friction factors and other hydraulic losses in large pipes, tunnels and conduits.

The membership of this new group includes:

F. L. Lawton, Chairman
F. B. Campbell
T. J. Rhone
Harry Ambrose
Leonard Longacre

The Task Force on Hydraulic Design and Operation of Spillways is preparing an annotated bibliography of available publications on its subject. Mr. E. R. Schultz has succeeded Mr. A. J. Peterka as Chairman of this Task Force.

The Task Force on Nomenclature for Hydraulics has compiled over 5000 glossary items together with supporting material. The Task Force met in Minneapolis, Minnesota, June 9-14, 1958, to review the glossary and plan a draft of the proposed manual. Mr. F. W. Blaisdell is Chairman of this Task Force.

The Task Force on Gates and Valves for Reservoir Conduits prepared papers for two technical sessions at the Portland Convention and is preparing additional papers for a later meeting. Mr. J. W. Ball has replaced Mr. P. F. Keim on the Task Force and Mr. J. H. Douma is Chairman.

The Task Force on Water Measurements has the draft of its manual over 50 per cent complete. Mr. M. W. Stewart is Chairman of this Task Force.

Hydromechanics Committee

The Committee on Hydromechanics held its annual meeting in Iowa City, Iowa on June 14, 1958. The four technical sessions sponsored by the committee during the past year were reviewed with regard to recommendations to authors on submission of papers for publication. Task Force reports were received and plans were made for participation in future Society meetings. Prof. D. R. F. Harleman is Chairman of this Committee.

The Task Force on Cavitation in Hydraulic Structures met in Minneapolis, Minnesota on May 23, 1958. Four series of papers on cavitation are planned for 1959. The subjects of these series are:

- 1. Introduction to the subject of cavitation with emphasis on problems encountered and illustrations of resulting damage.
- 2. Mechanics of cavitation, including a brief review of the theory involved.
- 3. Scale effects involved in experimental work, including an analysis of the variables affecting results.
- 4. Design procedures for the engineer, including allowable surface roughness, misalignment, transitions, and gate slots.

F. R. Brown is Chairman of this Task Force.

Sedimentation Committee

The Task Force on Local Scour met in Iowa City, Iowa, on June 19, 1958.

D. R. Schneible is Chairman of this Task Force.

In the Task Force on Sediment Distribution in Reservoirs, Mr. C. R. Miller succeeded Mr. Samuel Shulits as Chairman.

ATLANTA CONFERENCE

Distribution of this August Newsletter probably will be after the annual Hydraulics Division Conference in Atlanta. However, it is not too late for recognizing the many committee members who worked for its success.

General Chairman: Medford T. Thomson.

Registration: Harry H. Barnes, Chairman, Irving W. Bearse, P. Hadley Carrigan.

Housing: Lewis A. Young, Chairman, Paul W. Richards, James V. Walters.

Publicity: Leslie F. Johnson, Chairman, Benjamin L. Kittle, James W. Rabon.

Program: Carl E. Kindsvater, Chairman, Trafton W. Fleetwood, Frederick A. Kilpatrick, Robert D. Wilroy.

Exhibits and Tours: Marion R. Carstens, Chairman, Don B. Jones, George M. Slaughter, Hubert J. Tracy.

Finance: Benjamin M. Hall, Chairman, Arthur S. Booth.

Entertainment: Richard King, Chairman, Edmond L. Belladonna, Charles L. Mills.

Transportation: Paul M. Blair, Chairman, Laurence G. Leach, Kenith H. Miller, Douglas E. Schneible.

Ladies' and Children's Program: Mrs. C. E. Kindsvater and Mrs. M. T. Thomson, Co-Chairmen, Mrs. H. H. Barnes, Mrs. M. R. Carstens, Mrs. L. F. Johnson, Mrs. D. B. Jones.

ASCE ANNUAL CONVENTION

NEW YORK CITY

October 13-17, 1958

Tentative Hydraulics Division Program Session

Sponsored by

Committee on Tidal Hydraulics, Hydraulics Division
(May be Joint Session with Waterways and Harbors Division)

Tuesday Morning, October 14

Investigation of Sediment Transportation and Deposition in the St. Lawrence River in the Vicinity of Traverse Spit.

Raymond Boucher, Professor of Hydraulic Engineering and Chairman,
Department of Civil Engineering, Ecole Polytechnique, Montreal, Quebec,
Canada

Tidal Characteristics from Harmonic Constants

Bernard Zetler, U. S. Coast and Geodetic Survey, Washington, D. C.

Sand Bypassing Plans for Fire Island Inlet

F. H. Dechant, Consulting Engineer, Philadelphia, Pa.

Session Sponsored by

Committees on Flood Control and Hydrology

Tuesday Afternoon, October 14

Flood Control Aspects of the Cauca Valley Development

C. S. Ospina and P. Z. Kirpich

Flood Studies in the Upper Orinoco Basin of Venezuela

I. Hydrometeorology

H. R. Beyers and Herbert Riehl, University of Chicago, Chicago,
Illinois

II. Unit-Hydrograph and Flood Routing Studies and Description of Physical Works

Olin Kalmbach, R. J. Tipton Company, Denver, Colorado

An Engineering Appraisal of Hydrologic Data

D. W. Van Tuyl, Chairman of Task Force on Hydrologic Data

Session Sponsored by

Committee on Hydromechanics

Wednesday Afternoon, October 15

Symposium on Resistance in Open Channels

Progress Report from Task Committee on Friction in Open Channels

Julian Hinds, Chairman, Consulting Engineer, Santa Paula, California

Resistance Experiments in a Triangular Channel

C. J. Posey, Director, Rocky Mountains Hydraulic Laboratory and Head, Department of Civil Engineering, State University of Iowa, Iowa City, and R. W. Powell, Department of Engineering Mechanics, University of Kansas, Lawrence, Kansas.

Resistance Experiments in a Rectangular Channel

H. J. Koloseus, Hydraulic Engineer, U. S. Geological Survey, Iowa Institute of Hydraulic Research, Iowa City.

Resistance Experiments in an Alluvial-Bed Channel

D. B. Simons, and H. V. Richardson, Hydraulic Engineers, U. S. Geological Survey, Colorado State University, Fort Collins, Colorado.

Session Sponsored by

Committee on Hydraulic Structures

Thursday Morning, October 16

Spillway Design

Spillway Design for Pacific Northwest Projects

M. J. Webster, Engineer, Corps of Engineers, Portland, Oregon

The Upper Colorado River Projects

L. G. Puls, Chief Designing Engineer, Bureau of Reclamation, Denver, Colorado

Hydraulic Analysis of Surge Tanks by Digital Computer

N. L. Barbarossa, Head, Hydraulic Section, Missouri River Division, Corps of Engineers, Omaha, Nebraska

Session Sponsored by
Committee on Hydraulic Structures
Thursday Afternoon, October 16
Spillway Operation

Operation of Spillways in Northwest Projects

R. B. Cochrane, Chief, Multipurpose Projects Branch, Corps of Engineers, Portland, Oregon

Spillway Designs in California and their Performance

W. C. Cassidy, South Pacific Division, Corps of Engineers, San Francisco, California

Operation of Spillways and Sluices for the Tennessee Valley Dams

K. W. Kirkpatrick, Hydraulic Engineer, Tennessee Valley Authority, Norris, Tennessee

JOINT ASCE-IABSE MEETING

A unique opportunity to hear and meet some of the world's leading authorities on the design and behavior of structures and properties of materials will be provided at the October ASCE convention in New York. Thirteen European and fourteen American speakers will present papers at a joint meeting. Eight European countries will be represented.

The result of two years of planning and effort by members of the Society and the U. S. Council of International Association for Bridge and Structural Engineering, the meeting will cover a wide range of topics in steel and concrete properties, design and research. There will be eight half-day sessions during the convention. The program has been arranged to give a well-rounded picture of the most advanced current structural research developments and practice in Europe and the United States.

The technical program and all arrangements are being made by the Structural and Engineering Mechanics Divisions of ASCE and the U. S. Council of IABSE. The meeting has been made possible by a grant from the National Science Foundation and other contributions from organizations and individuals. The generous financial support of the meeting is a tribute to the national and international prestige and leadership of ASCE and IABSE in the civil engineering profession.

CONFERENCE ON ELECTRONIC COMPUTATION

The ASCE Structural Division and Kansas City, Missouri, Section are planning a conference on structural applications of electronic computers on 20-21 November 1958 in Kansas City, Missouri. General inquiries regarding the Conference on the Structural Division Committee on Electronic Computation should be addressed to the Committee Secretary, S. J. Fenves, Room 420 Civil Engineering Hall, University of Illinois, Urbana, Illinois.

1959 HYDRAULICS DIVISION CONFERENCE

The 1959 Hydraulics Division Conference is scheduled for the week of June 29, 1959, at Colorado State University in Fort Collins. Dr. A. R. Chamberlain and Prof. M. E. Bender, Jr., of the University will act as co-chairmen for local arrangements.

TECHNICAL PROCEDURE CONFERENCE

The 1958 ASCE Technical Procedure Conference met in Memphis, Tennessee, on May 1 and 2. This conference is conducted each year under the auspices of the ASCE Committee on Division Activities. Its purpose is to foster the interchange of information among the officers of the various technical divisions and the Society. Such interchange is essential if the divisions are to continue to grow in their service to the membership of ASCE and to the profession. Almost sixty division and Society officers were in attendance. It is true that the basic information necessary for the conduct of activities of the divisions is available in printed form, and it is circulated continuously to members taking part in the work of the divisions. Such information is contained in the Official Register of the Society, in the Technical Division Handbook, and in numerous additional printed material. The fact that such material is available does not mean, unfortunately, that all information contained therein has become a part of the fund of knowledge of each person participating in the work of the divisions. As a matter of fact, it appears at times to the Committee on Division Activities that some division personnel have not had an opportunity to read the material placed in their hands. This situation is understandable, recognizing that all division personnel carry on its work voluntarily—in addition to many other professional responsibilities and commitments. It is for the exchange of information regarding procedures, objectives and methods that these Technical Procedure Conferences are staged. Since they have been held, the rapid extension of the work of the divisions has been started. Through the committee work of the divisions, and through the extensive research activities conducted, new information is made available. Through the conventions and conferences and through the publications made possible by the work of the divisions, the outlet of such information to the ends of the earth is made possible. In this machinery lies the strength of ASCE. The extensive agenda included the following nineteen subjects of discussion, each introduced by a conferee specially prepared on his subject and followed by questions and discussion:

1. Expansion of Division Effectiveness through Better Management of Committees
2. Planning Committee Meetings for Most Effective Operation
3. The Need for Stronger Programs
4. Scheduling Sessions at Conventions and Conferences and Procedures for Attracting Attendance
5. Planning and Conducting Division Conferences
6. Selection of Speakers and Subjects for Programs
7. Operating of a Committee on Session Programs
8. Cooperation with Other Organizations in Conducting Conferences
9. Operation of a Division Committee on Publications
10. Steps in Production of Division Publications

11. Production and Distribution of Division News
12. ASCE Participation in Preparation of American Standards
13. ASCE Division Research Responsibilities
14. Relationship of Division Research to Foundations
15. Operation of Division Research Committees
16. Public Relations Opportunities of Divisions
17. Procedures for Selection of Executive Committee Members
18. Planning Activities for Next Fiscal Year to Permit Sound Budgeting
19. Preparation of a Division Budget

This conference was planned and financed by the Board of the Society to assure continuous growth of the technical divisions, growth in the extent of activity, and growth in service to the needs of the membership.

PATH OF AN ASCE MEETING MANUSCRIPT

(A Statement of ASCE Policy Pertaining to Meeting Papers and Proceedings Papers)

1. The new Technical Publications Handbook contains essential information for the guidance of authors, editors, and division reviewers, the basic requirements being abstracted and printed on the inside front cover. These basic requirements are standing matter which now appears on the inside front cover of every division journal.

2. Many of the meeting papers have been prepared with publication in mind, the oral presentation being abstracted from the longer draft. These should be transmitted directly to the Manager of Technical Publications for review by the appropriate technical division. The path of such a manuscript is fully described in the Technical Publications Handbook.

3. A few papers, solicited by the Program Committee strictly for meeting presentation, should not be entered in the review procedure while they are still in oral presentation form. By this is meant, in general, a manuscript referring informally to slides instead of figure numbers and using first and second person forms of address. If the author (or the Division Publications Committee) wishes to have such oral remarks converted into a paper for publication, an especially prepared manuscript should be submitted, as described in the Handbook.

4. An author sometimes provides a supply of mimeographed copies of his paper for distribution among those who attend his meeting presentation. Such authors will assist greatly if any copies remaining unused after the meeting presentation are brought to the Publications Center for free distribution during the remainder of the Convention.

5. The Society's Public Relations Department, is interested in examining the content of each paper for possible release to local and national magazines and newspapers.

6. The editors of CIVIL ENGINEERING, working in cooperation with the technical divisions, are also interested in the possibility of publishing papers with a construction emphasis and those having broad professional interest.

7. Restrictions of style, form and content applying to PROCEEDING PAPERS, do not necessarily apply to CIVIL ENGINEERING papers. A good CIVIL ENGINEERING paper can often be made of an oral meeting paper, provided the Technical Division, the author, and the CIVIL ENGINEERING editors

re in accord as to the appropriateness of the subject matter. The editors of CIVIL ENGINEERING go to considerable lengths to adapt the authors' ideas to the space limitations of that magazine.

8. Incidentally, it would be a service to the Society if every member could consider himself a self-appointed reporter for material of either technical or news interest to the Society's publications. Only in this way will it be possible for the Society's publications to meet the many needs of a Society publication.

9. The Society assumes that, upon formal presentation of a paper at its meetings, that paper becomes the exclusive property of the Society. Authors are requested to consult with this Society before releasing their work to a publication other than ASCE.

10. On the other hand, the Society adopts a liberal attitude towards publishers who wish to quote in part, or reproduce, a Society paper completely.

11. Consent to publish the complete paper in its entirety is given freely to other publishers, provided such publication is scheduled to occur concurrently with, or later than, publication by the Society.

12. Expressly, the Society's credit-line requirement is that "reprints from Society's publications may be made on condition that the full title of the paper, the name of the author, page reference (or paper number), and date of publication by the Society are given."

13. Reporters from other publishing organizations are welcome to attend all sessions and are free to report from notes of the spoken address, provided only that information declared "off the record" by the author be expunged, and that suitable credit is given for quoted matter.

PROCEEDINGS REPRINT SYMPOSIUM SERIES

Under current procedures it is possible for a member or group of members to purchase quantity lots of reprints, group them together and have the resulting "symposium" bound in a special cover. The Board Committee on Publications has given approval to the establishment of a series of such groupings under the serial designation "Proceedings Symposium Series." A given project must be proposed to the Publications Committee and, when approved, the Symposium will be held in stock at headquarters for delivery on order at the published list price. The Committee has been careful to stipulate that each decision to form such a group must be acted upon as a special case after reasonable assurance has been presented that there is a sufficient demand for the product.

This device is recommended as a preferred alternate to the tendency of some Divisions to group too many papers on one topic in a single monthly journal—a practice that complicates the orderly review of papers and the time required for publication. Such grouping reduces readership and tends to discourage discussion. By use of the Proceedings Symposium Series, each paper can be reviewed carefully and published directly, without being delayed by late authors in the group. Except for a few standardized identity devices, the covers can be designed to suit each individual case. The Proceedings Symposium Series will be available at a stated list price to non-members; the regular discount of 50 per cent will be offered to members.

The Technical Publications Department now operates as follows:

- (1) All individual technical papers and committee reports are submitted first to the Manager, Technical Publications for preliminary screening

as to the basic requirements for the Board of Direction.

- (2) The manuscripts are then referred to an appropriate Technical Division for careful expert review, and, in due course, referred back to the Manager, Technical Publications for disposal—declination or publication in a Division Journal. No editing is done at headquarters in this stage.
- (3) After publication, discussion, and closure in Proceedings, a technical paper or committee report may be—
 - (a) Closed finally in the Division Journal, and indexed in the year-end Journal of Professional Practice;
 - (b) Published with collated discussions in Transactions, as a paper, a Transactions symposium, or as a final report of a committee;
 - (c) Published as an ASCE Manual of Engineering Practice; or,
 - (d) Published in the Proceedings Symposium Series.

FOR YOUR CALENDAR

ASCE Meetings

August 20-22, 1958	Hydraulics Division, Atlanta Conference
September 9-11, 1958	ASCE-AMS, Second National Conference on Applied Meteorology: Engineering University of Michigan, Ann Arbor, Michigan
October 13-17, 1958	ASCE, New York Convention
February 9-13, 1959	ASCE, Los Angeles Convention
May 4-8, 1959	ASCE, Cleveland Convention
Week of June 29, 1959	Hydraulics Division, Fort Collins Conference
October 19-23, 1959	ASCE, Washington, D. C., Convention
March 7-11, 1960	ASCE, New Orleans Convention
June 19-23, 1960	ASCE, Reno Convention
October 9-13, 1960	ASCE, Boston Convention
April 10-15, 1961	ASCE, Phoenix Convention
October 16-20, 1961	ASCE, New York Convention
February 1962	ASCE, Houston Convention
May 1962	ASCE, Omaha Convention
October 15-19, 1962	ASCE, Detroit Convention

Non-ASCE Meetings

September 15-20, 1958	Sixth International Congress on Large Dams, New York
June 15-19, 1959	American Society for Engineering Education, Pittsburgh, Pennsylvania

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Hydraulics Division

1958-16--11

September, 1959

International Association for Hydraulic
Research, Montreal, Canada

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Newsletter Editor:

E. B. PICKETT
P. O. Box 631
Vicksburg, Mississippi

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